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What is claimed is:

1. A method for diagnosing the presence of lung cancer in a patient comprising:

(a) measuring levels of LSG in cells, tissues or
5 bodily fluids in said patient; and

(b) comparing the measured levels of LSG with
levels of LSG in cells, tissues or bodily fluids from a
normal human control, wherein an increase in measured
levels of LSG in said patient versus normal human control
10 is associated with the presence of lung cancer.

2. A method of diagnosing metastatic lung cancer in
a patient comprising:

(a) identifying a patient having lung cancer that is
not known to have metastasized;

15 (b) measuring LSG levels in a sample of cells,
tissues, or bodily fluid from said patient for LSG; and

(c) comparing the measured LSG levels with levels of
LSG in cell, tissue, or bodily fluid type of a normal
human control, wherein an increase in measured LSG levels
20 in the patient versus the normal human control is
associated with a cancer which has metastasized.

3. A method of staging lung cancer in a patient
having lung cancer comprising:

(a) identifying a patient having lung cancer;

25 (b) measuring LSG levels in a sample of cells,
tissues, or bodily fluid from said patient; and

(c) comparing measured LSG levels with levels of LSG
in cells, tissues, or bodily fluid type of a normal human
control sample, wherein an increase in measured LSG levels
30 in said patient versus the normal human control is
associated with a cancer which is progressing and a
decrease in the measured LSG levels is associated with a
cancer which is regressing or in remission.

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4. A method of monitoring lung cancer in a patient for the onset of metastasis comprising:

(a) identifying a patient having lung cancer that is
5 not known to have metastasized;

(b) periodically measuring levels of LSG in samples of cells, tissues, or bodily fluid from said patient for LSG; and

(c) comparing the periodically measured LSG levels
10 with levels of LSG in cells, tissues, or bodily fluid type of a normal human control, wherein an increase in any one of the periodically measured LSG levels in the patient versus the normal human control is associated with a cancer which has metastasized.

15 5. A method of monitoring changes in a stage of lung cancer in a patient comprising:

(a) identifying a patient having lung cancer;

(b) periodically measuring levels of LSG in cells, tissues, or bodily fluid from said patient; and

20 (c) comparing the periodically measured LSG levels with levels of LSG in cells, tissues, or bodily fluid type of a normal human control, wherein an increase in any one of the periodically measured LSG levels in the patient versus the normal human control is associated with a
25 cancer which is progressing in stage and a decrease is associated with a cancer which is regressing in stage or in remission.

6. The method of claim 1, 2, 3, 4 or 5 wherein the LSG comprises SEQ ID NO:4 or 5.

30 7. An antibody against an LSG wherein said LSG comprises SEQ ID NO:4 or SEQ ID NO:5.

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8. A method of imaging lung cancer in a patient comprising administering to the patient an antibody of claim 7.

9. The method of claim 8 wherein said antibody is
5 labeled with paramagnetic ions or a radioisotope.

10. A method of treating lung cancer in a patient comprising administering to the patient an antibody of
claim 7.

11. The method of claim 10 wherein the antibody is
10 conjugated to a cytotoxic agent.

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